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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
KIM, PAUL	

ART UNIT	PAPER NUMBER
2161	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/780,007	CHOWDHURY ET AL.	
	Examiner	Art Unit	
	Paul Kim	2161	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 October 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6 and 15-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6 and 15-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This Office action is responsive to the following communication: Amendment filed on 5 October 2007.

2. Claims 1-6 and 15-20 are pending and present for examination. Claims 1, 15, and 20 are in independent form.

Continued Examination Under 37 CFR 1.114

3. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5 October 2007 has been entered.

Response to Amendment

4. Claim 1 has been amended.

5. No claims have been further cancelled.

6. No claims have been further added.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. **Claims 1-3 and 20** are rejected under 35 U.S.C. 103(a) as being unpatentable over Chu et al (U.S. Patent No. 6,970,924, hereinafter referred to as CHU), filed on 23 February 1999, and issued on 29 November 2005, in further view of Kelley et al, filed on 31 July 2002, published on 5 February 2004, and issued on 29 May 2007.

9. **As per independent claim 1,** CHU, in combination with KELLEY, discloses:

A method of determining an Internet Protocol (IP) address of an application server of a serving network, comprising:

receiving an IP address by a user equipment (UE) {See CHU, C16:L7-32, wherein this reads over "[p]erforming a reverse DNS lookup on each IP address"};

performing a reverse domain name query by the UE as a function of the received IP address {See CHU, C16:L7-32, wherein this reads over "[p]erforming a reverse DNS lookup on each IP address"};

receiving, by the UE, a response from the visited serving network to the reverse domain name query {See CHU, C16:L7-32, wherein this reads over "[p]erforming a reverse DNS lookup on each IP address returns strings representing host names for links (e.g. 208.218.140.5 may map to inverse-gwl.alter.net)"};

deriving, by the UE, serving network domain name information from the reverse domain name query {See CHU, C16:L7-32, wherein this reads over "a router with links names 'host1.inverse.net' and 'host2.alter.net' may be situated on the administrative boundary between 'inverse.net' and 'alter.net'" and "[a] central server, such as the server at whois.internic.net, can be queries for the owner of a given IP address. Whois requests return domain names"};

appending, by the UE, derived serving network domain name information to an application server name {See CHU, C16:L7-32, wherein this reads over "a router with links names 'host1.inverse.net' and 'host2.alter.net'"}, thereby generating a domain-specific application server name {See KELLEY, Figure 3; and C7:L31-14, wherein this reads over "the reference . . . may be utilized to dynamically generate a canonical name"};

performing, by the UE, a domain name query as a function of the domain-specific application server name {See CHU, C16:L7-32, wherein this reads over "a router with links names 'host1.inverse.net' and 'host2.alter.net' may be situated on the administrative boundary between 'inverse.net' and 'alter.net'" and "[a] central server, such as the server at whois.internic.net, can be queries for the owner of a given IP address. Whois requests return domain names"}; and

receiving, by the UE, a second IP address as a function of the domain-specific application server name {See CHU, C16:L7-32, wherein this reads over "[p]erforming a reverse DNS lookup on each IP address returns strings representing host names for links (e.g. 208.218.140.5 may map to inverse-gwl.alter.net)"}.

While CHU may fail to expressly disclose the generation of a domain-specific application server name, KELLEY disclose a method wherein parsed pieces of a reference may be used to dynamically

generate a canonical name. Accordingly, the modification of CHU by KELLEY would lead to a combination wherein the derived serving network domain name information may be appended dynamically to generate a domain-specific application server name. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the above invention suggested by CHU by combining it with the invention disclosed by KELLEY.

One of ordinary skill in the art would have been motivated to do this modification so that the domain-specific application server name may be used by the domain name query to return an IP address of the application server.

10. **As per dependent claim 2,** CHU, in combination with KELLEY, discloses:

The method of claim 1, wherein the receiving an IP address comprises receiving an IP address for the UE {See CHU, C16:L7-32, wherein this reads over "[b]oundary routers" and "each IP address"}.

11. **As per dependent claim 3,** it would be inherent for the step of receiving an IP address comprised of receiving an IP address associated with a device providing an IP address to the serving network since without the IP address, none of the subsequent steps of the claimed invention would be possible.

12. **As per independent claim 20,** CHU, in combination with KELLEY, discloses:

A system for determining an Internet Protocol (IP) address of an application server of a serving network, comprising:

A user equipment (UE) in communication with an access gateway of the serving network, wherein the UE is configured to:

request an IP address for the UE from the serving network;

receive the requested IP address associated with the UE {See CHU, C16:L7-32, wherein this reads over "[p]erforming a reverse DNS lookup on each IP address"};

perform a reverse domain name query as a function of the received IP address {See CHU, C16:L7-32, wherein this reads over "[p]erforming a reverse DNS lookup on each IP address"};

receive a response to the reverse domain name query {See CHU, C16:L7-32, wherein this reads over "[p]erforming a reverse DNS lookup on each IP address returns strings representing host names for links (e.g. 208.218.140.5 may map to inverse-gwl.alter.net)"};

deriving domain name information from the reverse domain name query {See CHU, C16:L7-32, wherein this reads over "a router with links names 'host1.inverse.net' and 'host2.alter.net' may be situated on the administrative boundary between 'inverse.net' and 'alter.net'" and "[a] central server, such as the server at whois.internic.net, can be queries for the owner of a given IP address. Whois requests return domain names"};

append the derived serving network domain name information to a standardized application server name, thereby generating a domain-specific application server name {See CHU, C16:L7-32, wherein this reads over "a router with links names 'host1.inverse.net' and 'host2.alter.net'"};

perform a domain name query as a function of the domain-specific application server name {See CHU, C16:L7-32, wherein this reads over "a router with links names 'host1.inverse.net' and 'host2.alter.net' may be situated on the administrative boundary between 'inverse.net' and 'alter.net'" and "[a] central server, such as the server at whois.internic.net, can be queries for the owner of a given IP address. Whois requests return domain names"}; and

receive a second IP address as a function of the domain-specific application server name {See CHU, C16:L7-32, wherein this reads over "[p]erforming a reverse DNS lookup on each IP address returns strings representing host names for links (e.g. 208.218.140.5 may map to inverse-gwl.alter.net)"}; and

logic to extract a domain name from the reverse domain name query.

The examiner notes that it would be inherent for the claimed invention to comprise of logic to extract a domain name from the reverse domain name query wherein the invention is configured to perform reverse domain name queries. That is, it is necessary to the claimed invention that the system comprise of logic wherein said logic is used to perform the steps in the extraction of a domain name from a reverse domain name query.

Additionally, while CHU may fail to expressly disclose the generation of a domain-specific application server name, KELLEY disclose a method wherein parsed pieces of a reference may be used to dynamically generate a canonical name. Accordingly, the modification of CHU by KELLEY would lead to a combination wherein the derived serving network domain name information may be appended dynamically to generate a domain-specific application server name. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the above invention suggested by CHU by combining it with the invention disclosed by KELLEY.

One of ordinary skill in the art would have been motivated to do this modification so that the domain-specific application server name may be used by the domain name query to return an IP address of the application server.

13. **Claims 4-6 and 15-19** are rejected under 35 U.S.C. 103(a) as being unpatentable over CHU, in view of Official Notice.

14. **As per dependent claims 4 and 19**, the Examiner takes Official Notice that it would have been obvious to one of ordinary skill in the art at the time the invention was made to transmit an IP address of a gateway to the UE since a gateway is well-known and commonly-used within the art to connect two IP-based networks.

15. **As per dependent claim 5**, the Examiner takes Official Notice that it would have been obvious to one of ordinary skill in the art at the time the invention was made to derive information from a Uniform Resource Identifier (URI), since a URI is well-known and commonly-used within the art to identify a resource.

16. **As per dependent claim 6**, the Examiner takes Official Notice that it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the application server be a Proxy Call Session Control Function (P-CSCF) server name since a P-CSCF server is simply another type of application server available.

17. **As per dependent claim 15,** the Examiner takes Official Notice that it would have been obvious to one of ordinary skill in the art at the time the invention was made to have a system comprise of an access gateway and a DNS associated with the access gateway since an access gateway is commonly-used within networks as a gatekeeper for access to the Internet. Furthermore, the aforementioned reasons for the rejection of claim 1 are incorporated herein.

18. **As per dependent claim 16,** the Examiner takes Official Notice that it would have been obvious to one of ordinary skill in the art at the time the invention was made for the serving network to

have a URI since a URI is commonly-used and well-known in the art to be used as an identifier of network resources.

19. **As per dependent claim 17,** CHU, in combination with KELLEY and Official Notice, discloses:

The method of claim 1, wherein the step of receiving an IP address further comprises receiving an IP address for a user equipment (UE) {See CHU, C16:L7-32, wherein this reads over "[b]oundary routers" and "each IP address"}.

20. **As per dependent claim 18,** it would be inherent for the step of receiving an IP address comprised of receiving an IP address associated with a device providing an IP address to the serving network since without the IP address, none of the subsequent steps of the claimed invention would be possible.

Response to Arguments

21. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Kim whose telephone number is (571) 272-2737. The examiner can normally be reached on M-F, 9am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Apu Mofiz can be reached on (571) 272-4080. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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